



## **Chapter 173-18, 173-20, 173-22, and 173-27 WAC**

### **Preliminary Benefit, Cost, and Least Burdensome Analysis for the Proposed Shoreline Management Act Rules Update**

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August/2006

Publication Number: 06-06-018



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## EXECUTIVE SUMMARY

### Updating Rules for Shorelines of the State through local programs

These rule amendments propose a revision to the agency's method of updating the "official" maps of shoreline jurisdiction, to insure consistency with updated Shoreline Master Programs (SMPs) in preparation by cities and counties across the state. The current "official" maps and lists of Shoreline jurisdiction were incorporated into the Washington Administrative Code (WAC) in the early 1970's. The amendment revises the rules so that each local government's new, updated SMP maps become the "official" map of shoreline jurisdiction when the Department approves a new Shoreline Master Program. Many of these programs have not been amended since they were first adopted in the 1970s. The Department of Ecology is providing grant funding and technical assistance to these local projects, and is responsible for reviewing and approving the updated programs. Updated maps and list of "Shorelines of the State" will be a fundamental element of the new city and county SMPs. After the comprehensive SMP update, if additional water bodies need to be included as Shorelines of the State, the rule amendment would stipulate that the local government update their SMP within 3 years. Shorelines of the State are the water bodies in each city or county covered by the shoreline program, as defined in state law (RCW 90.58). ***The proposed rule amendments do not change any definition or the management of shorelines of the state.***

Shoreline areas include:

- All marine waters.
- Streams over 20 cubic feet per second mean annual flow (cfsmaf).
- Surface waters other than streams more than 20 acres within their ordinary high water mark.
- Shorelands, which are lands within 200 feet of the ordinary high water mark of water bodies, or lands within 200 feet of stream floodways, or the landward extent of adjacent wetlands, whichever is greater.

After the Washington State Shoreline Management Act (SMA) was passed in 1971, the State Department of Ecology and local governments identified the water bodies to be covered in the shoreline master programs (SMP's). These water body lists were incorporated into Washington Administrative Codes (WAC). Local governments included those lists in their SMPs and applied their goals, policies and development regulations to them.

The Department of Ecology proposes to amend its rules to eliminate these lists of water bodies in Washington Administrative Code. New rule language allows local jurisdictions to provide Ecology-approved updated mapping and lists as part of their Shoreline Management Plan. The proposed rule amendment will provide consistency of information and avoid potential legal conflicts between Ecology's current (old WAC) rule language and

updated (new) local shoreline master programs. The first comprehensive SMP updates are scheduled to be submitted to Ecology by the end of 2005, with final Ecology approval anticipated during the first half of 2006.

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## Evaluation of Probable Benefits and Costs and Least Burdensome Analysis

The Department of Ecology (Ecology) is considering updating four rules implementing the Shoreline Management Act. RCW 34.05.328 mandates that:

*“(1) before adopting a rule...., an agency shall....(c) determine that the probable benefits of the rule are greater than its probable costs taking into account both the qualitative and quantitative benefits and costs and the specific directives of the statute being implemented; (d) determine, after considering alternative versions of the rule and the analysis required under...(c) of this subsection, that the rule being adopted is the least burdensome alternative for those required to comply with it that will achieve the general goals and specific objectives stated under (a) of this subsection.”*

This analysis describes the probable benefits and costs for the proposed rule amendments.

Ecology has determined that the probable benefits of the proposed rule exceed the probable costs and that this rule is the least burdensome alternative for those required to comply.

### 1. Summary of Significant Changes

Ecology is proposing changes to the Shoreline Management Act rule sections pertaining to delineation of streams, lakes, and wetlands included as Shorelines of the State.

Ecology’s objective in adopting the proposed rule amendments is to:

1. Comply with the legislative mandate in Chapter 90.58.060 RCW
2. Update the existing rules (WAC 173-18, 173-20, 173-22, 173-27) and eliminate confusion with new Ecology approved Shoreline Master Programs. ***(The proposed rules do not amend the Shoreline Master Program Guidelines contained in WAC 173-26.)***

The primary purpose of the 2006 draft of the proposed rule amendments is to prevent legal confusion between the new Ecology approved Shoreline Master Programs adopted by local governments and the outdated 1970s-era lists adopted by Ecology included in the Washington Administrative Code (WAC). Over the next decade, Ecology will review and approve updated SMPs for nearly 250 cities and counties that will include refined and updated maps identifying local Shorelines of the State. There is potential for conflict because the current Ecology adopted rules regarding Shorelines of the State will prevail

until new rules (including lists and maps) replace them. The proposed rules will resolve this potential conflict.

The key proposed rule amendment is this: When updated Shoreline maps and lists are approved as part of a comprehensive Shoreline Master Program update, these maps and lists will become the official description of “Shorelines of the State” within that local jurisdiction. Updating Shoreline maps as part of the SMP update process also provides optimal opportunity for public review and comment.

In cities or counties where Ecology has approved an updated SMP, the revised rule will direct readers to that SMP for delineating Shorelines of the State. Lists of shorelines in the existing rule (WAC) will continue to apply until an SMP is updated and approved by Ecology.

Several “housekeeping” rule amendments are also proposed. Through appeals to hearings boards and courts, several sections of the existing regulation have been ruled to be out of compliance with the Shoreline Management Act or other legal requirements. Proposed revisions to address these include:

- Amend “floodway” definition to delete a reference to using FEMA’s floodway map (173-22-030(5));
- Revise the “date of filing” definition (WAC 173-27-130(6) and (7)) to conform to state law; and
- Remove Thomas Lake listing from WAC 173-20-640 to conform to case law.

Without adopting the “housecleaning” rule amendments, there could be continued non-compliance with these hearings board and court cases.

## **2. Overview of Benefits and Costs**

The proposed rule changes will result in consistency of information for all jurisdictions and avoid potential legal conflicts between Ecology’s current (old) rule language and updated (new) local Shoreline Master Programs. A continued and more precise stewardship of the environment will result with some minimal costs on those local jurisdictions required to comply. Ecology must determine if the probable benefits exceed the probable costs associated with the proposed rule amendments.

Uncertainty limits this analysis. It is impossible to know with certainty how each particular local government could revise their SMP over the next 10 years. Therefore, this analysis presents an estimate of the administrative benefits and costs based on available data, and probable scenarios. Even if all the effects could be predicted, the lack of available data produces uncertainty regarding the benefits associated with the proposed rule.



### 3. Overview of Costs

The proposed amendments to WAC's 173-18, 20, 22 and 27 will significantly improve the management of Shoreline Master Programs. However, inevitably there will be some administrative costs. These costs are currently grant funded for the two year Shoreline Management Program "update period" therefore no additional costs will be borne by those required to comply with this rule<sup>1</sup>. Pre-funded costs include:

- Administrative costs associated with mapping and updating shoreline records.
- Government implementation costs consisting of ongoing administration.
- Other costs may include additional costs for permits, the cost for the loss of site choices, etc.

Any additional costs outside the grant funded "SMP update period" prove to be difficult to quantify before local governments complete their SMP and more data is available.

The only costs from this that would not be covered are any water body updates to the plan after the initial comprehensive SMP update. In the long term, the proposed rule anticipates that local governments would incorporate any newly-found water bodies into their SMP within 3 years of discovery. Ecology identifies one distinct kind of "new" water body we can anticipate are new reservoirs. Looking to the coming decade, the Ecology Dam Safety Office<sup>2</sup> suggests we assume 2 new reservoirs per year (State-wide) of 20 acres or larger for cost estimating purposes.

#### 3.1 Costs

For cost projections we use<sup>3</sup>:

Local government costs including characterization of shoreline conditions, environmental designation, public hearing and adoption are conservatively estimated at \$20,000.

Ecology conservatively estimated costs for preliminary comment during local government process, department review and adoption. Cost are estimate at \$20,000 per water body. This would give us a projected total annual cost of \$40,000 for 2 new reservoirs/year in Washington subject to the Shoreline Management Act starting in 2006.

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<sup>1</sup> Substitute Senate Bill 6012 2003 Regular Session. Funding for Shoreline Management Plans. RCW 90.58.080 Timetable for local governments to develop or amend master programs. Some jurisdictions updating their SMP prior to their required date are not receiving grant funds.

<sup>2</sup> ECY Dam Safety Office Lead, Doug Johnson.

<sup>3</sup> Policy Lead on Shoreline Management Plans Updates, Peter Skowlund.

Ecology estimates the decade total administrative costs of updated water bodies Shoreline Management Programs outside the pre-funded update period could be as high as \$200,000 by 2015. This estimate takes into account the SMP update schedule<sup>1</sup> for updates over the next 10 years. Local jurisdictions will update their SMPs on a staggered schedule through the year 2014. Because of this staggered schedule, only half of this time period will be used for estimation of costs as jurisdictions update their Shoreline Management Plans.<sup>2</sup>

No other foreseen costs to industries such as aquaculture, boating facilities, mining, recreational development, transportation, parking, utilities or other potential impacts will be affected by the rule amendments.

## **4. Overview of Benefits**

Benefits of the new rule language are broken down into four primary categories.

### **Updated Mapping of Shoreline areas and water body information.**

Information reflects the proposed use of local shoreline master programs to designate shoreline areas. Benefits provide local governments and other users with current information on shorelines, water body flow and size, floodplains and critical-areas buffers.

Updated data provides current information on water-body flow and size. This includes accurate data developed by cities, counties, state and federal agencies over the past few decades. This information will be incorporated into the updated SMPs. Ecology's updated information on 20 cfsmaf points for all streams across the state are part of SMP updates and a benefit to users of the information. Information includes any alteration of the shoreline, and information on human uses of the water and surrounding land. New information may alter the boundary of shoreline jurisdiction, changing the ordinary high-water mark or the other physical characteristics that determine jurisdiction of the Shoreline Management Act. Examples of such alterations include permitted changes, such as land-filling and dredging, flood-control projects, and natural changes due to landslides, flooding, channel alterations or river-course changes.

New mapping will bring clarity on any annexations, altered shoreline boundaries, local floodplains and critical-area buffers and other pertinent information of their Shoreline Management Plan.

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<sup>1</sup> Appendix Table 1 SMP Update Schedule

<sup>2</sup> Additional administrative costs will progressively diminish as SMP update schedule takes effect. ie: Later updaters will not be subject to additional administrative costs proposed by keeping their information updated every 3 years.

### **Court Decisions**

New rule language removes inconsistency with statutory language in accordance with court decisions. This compliance with a Court of Appeals decision clarifies filing criteria by invalidating existing WAC definition of the "date of filing" (115 Wn. App. 164).

### **Revised Code of Washington language clarifications list updates**

The proposed rule removes misleading language and amends an incomplete list of exemptions which benefits readers and those required to comply with Chapter 90.58 RCW. Improves clarity and correctness of rule language, removes redundant language and removes references to non-existent Washington Administrative Code.

### **Support of Shoreline Management Act**

This includes general compliance to existing stewardship of the environment. These benefits include continued compliance for flood hazard reduction, public access, shoreline vegetation conservation, water quality, storm water, non-point pollution, and various social benefits such as; improving aquatic and upland wildlife habitats, increased water quality and recreational amenities, reduced flood damage, soil erosion, bank instability all leading to increased property value, aesthetic and cultural benefits.

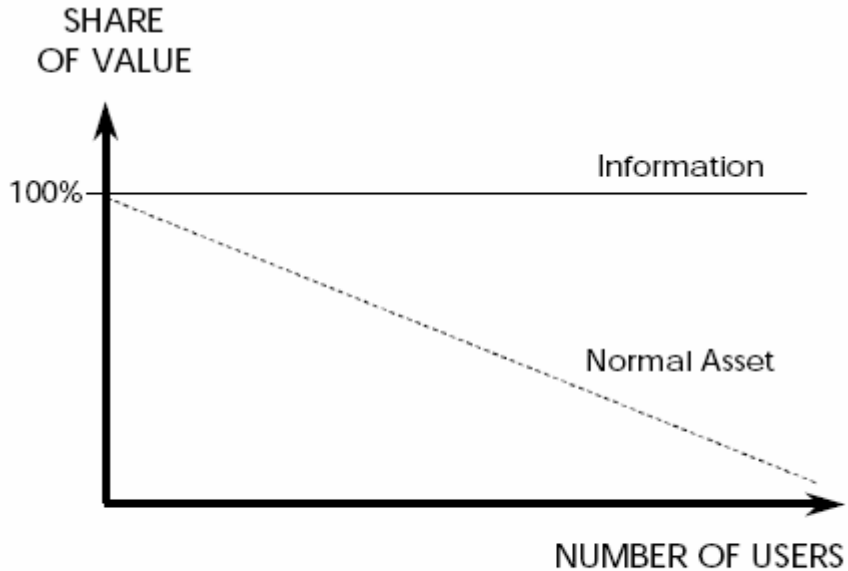
## **4.1 Benefits**

The measurement of the benefits associated with a policy change is easier if the resource in question is a marketed commodity and information on prices and quantities consumed are available. This information can be used to define a demand curve and can be used to quantify the benefits.

Unfortunately, the benefits generated from this rule amendment and these new updates to SMP requirements are not associated with a market, and/or no market prices exist. Although it is impossible to assess these benefits directly, the benefits of having complete information for those affected by this rule can be estimated. The approach used in this analysis adapts previous asset valuation as the method reflecting the characteristics of information value as a benefit.

The following principles are assumed.

**Information Is Shareable (Figure 1)** Perhaps the most unique characteristic of information as an asset is that it can be shared between any number of people, business areas and organizations without consequent loss of value. In general, sharing of information tends to multiply its value the more people who use it. Thus, more economic benefits can be extracted from it.



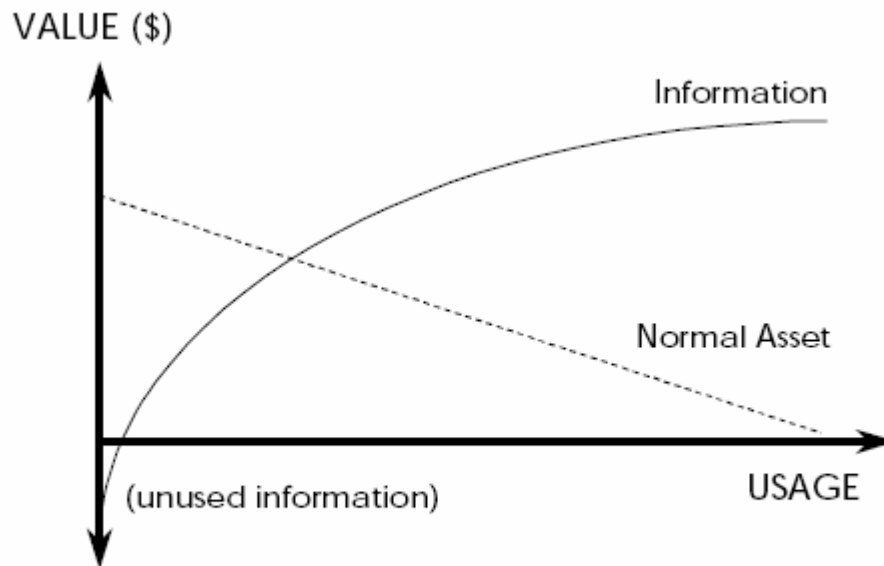
**Figure 1. Shareability of Information**

**The Value of Information Increases With Use (Figure 2)**

Most resources exhibit decreasing returns to use. Information has no real value on its own, it only becomes valuable when people use it.

The prerequisites for using information effectively are:

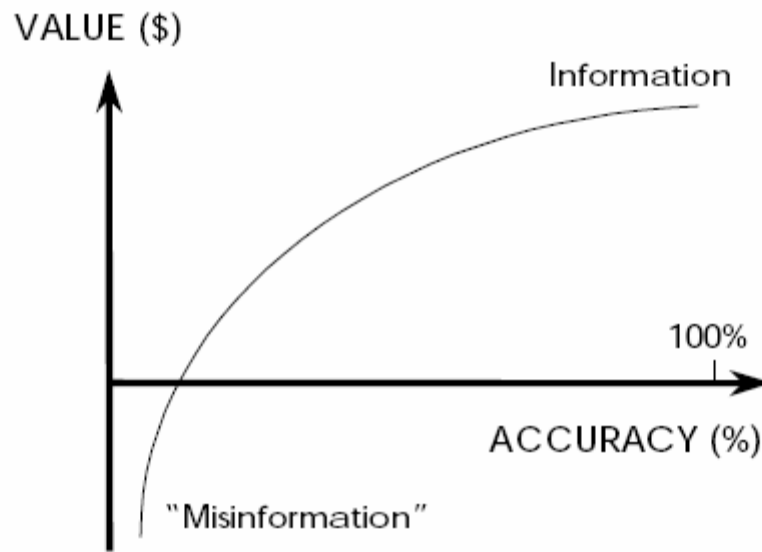
- knowing it exists
- knowing where it is located
- having access to it
- knowing how to use it



**Figure 2. The value of information increases with use**

**The Value of Information Increases With Accuracy (Figure 3)**

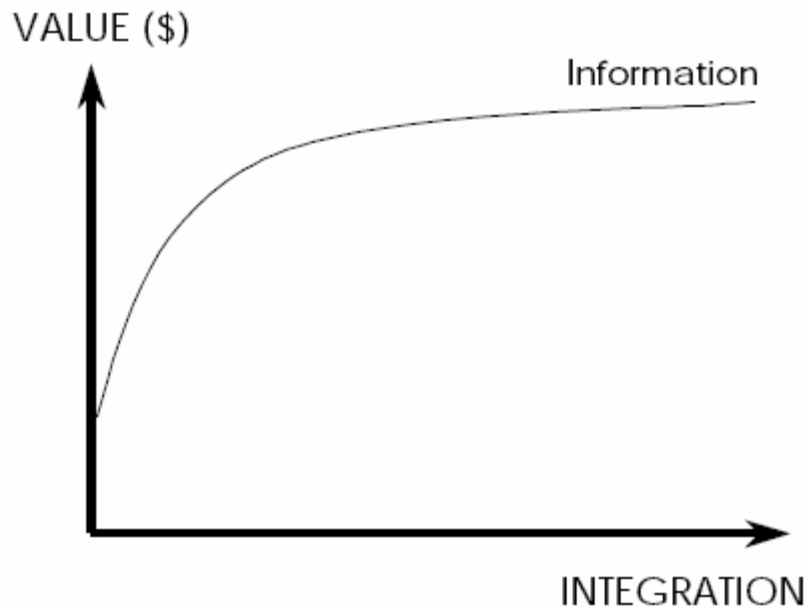
In general, the more accurate information is, the more useful and therefore valuable it is. Inaccurate information can be very costly to users in terms of both operational errors and incorrect decision making. The level of accuracy required is highly dependent on the type of information and how it is used. For this analysis, 100% accuracy is assumed.



**Figure 3. Value increases with accuracy**

**The Value of Information Increases When Combined With Other Information  
(Figure 4)**

Information generally becomes more valuable when it can be compared and combined with other information. Most resources are depletable. The more you use, the less you have. However, information is self-generating the more you use it, the more you have.



**Figure 4. Value increases with integration**

### **Valuation of SMP systems**

We use historical cost valuation for this method (proposed cost to implement the SMP system). This says the asset is valued based on how much was originally paid, or in this case estimated, to acquire the asset. Ecology used a contingent valuation method to determine jurisdictions “willingness to pay” for the services and therefore derive the benefits (cost of system). The assumption is that a firm, behaving rationally, will only spend money to acquire an asset if it believes it will receive at least an equivalent amount in the future in service potential or economic benefits.

The evaluation of the benefits assumes complete and accurate administrative information is needed for all to receive the full benefit. Ecology will not use a utility valuing (present value) method for determining the benefit. The weakness of this method is the difficulty of determining the specific future of the SMP updates and the subjectivity of benefit valuation.

The best information available for benefits is on SMP update cost and system are from an analysis conducted by Ecology staff and a small number of local governments<sup>1</sup> in 1999.

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<sup>1</sup> City: Buckley, Bellingham, Dayton, and Everett. County: Pend Oreille, Walla Walla and Yakima.

This serves as each jurisdictions “Willingness To Pay” for accurate and up-to-date information.

The study attempted to elicit actual costs of updating individual local government shoreline master programs, not including the day-to-day cost of implementing such programs. After extrapolating to 243 local governments likely to be affected by the proposed rule amendments, the total system was determined to be approximately \$18.8 million<sup>1</sup>. Complete and accurate information is assumed to achieve the full benefit of the program.

Secondary benefits of updated accurate and up-to-date Shoreline Management Plans will not be quantified but will be qualified from previous cost benefit analysis of the Shoreline Management Programs completed in 2003<sup>2</sup>. This study demonstrated the probable benefits are far greater than the probable costs and that any small adjustments of the economic models, parameters and/or data do not alter the final results.

This study concluded the new SMP rules will result in potentially significant social benefits through better shoreline protection and improvements. Compared with the benefits, the costs of an updated system are relatively small, and the implementation of the new rules should generate net benefits of billions of dollars during a 20-year time horizon.

## 5. Conclusions

As noted before, to comply with the existing rules, local governments must inventory existing shorelines to identify ecological functions, estimate future demand for shorelines, consider public access, establish activity policies and regulations, establish environmental designations, prepare new development standards, and submit their Shoreline Management Plans to Ecology. They must also consider ecological restoration, vegetation conservation, geologically hazardous areas, flood hazards and management of critical saltwater habitats.

The purpose of the 2006 amended rules is to prevent legal confusion between the new Ecology approved Shoreline Master Programs and the outdated lists of water bodies included in Washington Administrative Code (WAC). The proposed rule should resolve any potential conflicts by reducing redundancy and clarifying the administrative information. These “housekeeping” rule amendments will benefit any consumers of the information and greatly benefit those jurisdictions updating their information in their SMP.

Over the next ten years, Ecology will review and approve updated SMPs for nearly 250 cities and counties that will include refined and updated maps identifying local Shorelines

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<sup>1</sup> Appendix Table B: Shoreline Master Program Cost Estimates, 2000.

<sup>2</sup> Ecology: Evaluation of Probable Benefits and Costs for Shoreline Master Program Guidelines.



of the State. The costs of these updates are administrative in nature. Although all updates to the SMPs are assumed to take place during the scheduled “update period” that is already funded, there may be some additional administrative costs of updating new water bodies not yet identified such as “new reservoirs” after the scheduled updates. The administrative costs of these “unknown entities” are estimated in the above analysis and should be very small compared to the benefits.

The best information available for benefits is how much the jurisdictions are willing to pay for accurate and up-to-date information. An Ecology study attempted to elicit actual costs of updating individual local government shoreline master programs and these costs were used to demonstrate the benefit that a jurisdiction receives for complete and accurate information. Secondary benefits of updated accurate and up-to date Shoreline Management Plans will not be quantified for water body updates as these benefits were quantified in previous cost benefit analysis of the Shoreline Management Programs completed in 2003<sup>1</sup>. This study of these administrative updates demonstrate the probable benefits are far greater than the probable costs and that any small adjustments of the data parameters do not alter the final results.

### **Least Burdensome Alternative Analysis**

The Washington Administrative Procedure Act (APA) requires that significant legislative rules be evaluated to determine, after considering alternative versions of the rule and the analysis required under (b) and (c) of this subsection, that the rule being adopted is the least burdensome alternative for those required to comply with it that will achieve the general goals and specific objectives stated under (a) of this subsection.” (RCW 34.05.328(1)(d)).

This determination must be documented prior to final rule adoption and included in the rulemaking record. This analysis summarizes whether this version of the rule is the least burdensome alternative that will achieve the general goals and specific objectives of the statute.

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<sup>1</sup> Ecology: Evaluation of Probable Benefits and Costs for Shoreline Master Program Guidelines.

## **Alternatives considered and assessment of burden**

### **No Action Alternative**

If no action is taken to affirmatively update the SMA rules, the following may occur:

- **Potential legal conflict may arise between the new maps in the revised Shoreline Master Programs and the old lists in the SMA WAC.** Ecology approval of the new SMPs will occur via letter from the Ecology department Director. There could be legal confusion between these two documents. In particular, it could be argued that the adopted 1970's rule should have a higher legal standing than the new letter-approved SMPs.
- **Continued potential non-compliance with Hearings Board and Court decisions:** Without adoption of the "housecleaning" rule amendment, there could be continued non-compliance with outcomes of board and court cases where Ecology's rules were found to exceed our authority and requirements under the statute.

## Appendix

### Appendix Table A:

#### *SMA Update Schedule*

County & municipality:	RCW 90.58.080 deadline *		
Aberdeen	12/1/2014		
<b>Adams Co Unincorporated</b>	<b>12/1/2014</b>	<b>Chelan Co Unincorporated</b>	<b>12/1/2013</b>
Albion	12/1/2014	Chewelah	12/1/2014
Anacortes	12/1/2012	<b>Clallam Co Unincorporated</b>	<b>12/1/2011</b>
Arlington	12/1/2011	<b>Clark Co Unincorporated</b>	<b>12/1/2011</b>
Asotin	12/1/2014	Clarkston	12/1/2014
<b>Asotin Co Unincorporated</b>	<b>12/1/2014</b>	Cle Elum	12/1/2013
Auburn <i>King Co part</i>	12/1/2009	Colfax	12/1/2014
Auburn <i>Pierce Co part</i>	12/1/2011	<b>Columbia Co</b>	<b>12/1/2014</b>
Bainbridge Island	12/1/2011	<b>nincorporated</b>	
Beaux Arts Village	12/1/2011	Colville	12/1/2014
Bellevue	12/1/2009	Conconully	12/1/2014
Bellingham	12/1/2005	Concrete	12/1/2012
Benton City	12/1/2013	Cosmopolis	12/1/2014
<b>Benton Co Unincorporated</b>	<b>12/1/2013</b>	Coulee City	12/1/2013
Bingen	12/1/2014	Coulee Dam <i>Douglas Co part</i>	12/1/2013
Black Diamond	12/1/2011	Coulee Dam <i>Grant Co part</i>	12/1/2013
Blaine	12/1/2011	Coulee Dam <i>Okanogan Co</i>	12/1/2014
Bonney Lake	12/1/2011	<i>art</i>	
Bothell <i>King Co part</i>	12/1/2009	Coupeville	12/1/2012
Bothell <i>Snohomish Co part</i>	12/1/2011	Covington	12/1/2009
Bremerton	12/1/2011	<b>Cowlitz Co Unincorporated</b>	<b>12/1/2012</b>
Brewster	12/1/2014	Cusick	12/1/2014
Bridgeport	12/1/2013	Darrington	12/1/2011
Brier	12/1/2011	Dayton	12/1/2014
Buckley	12/1/2011	Des Moines	12/1/2009
Bucoda	12/1/2011	<b>Douglas Co</b>	<b>12/1/2013</b>
Burien	12/1/2009	<b>nincorporated</b>	
Burlington	12/1/2012	DuPont	12/1/2011
Camas	12/1/2011	Duvall	12/1/2011
Carnation	12/1/2011	East Wenatchee	12/1/2013
Cashmere	12/1/2013	Eatonville	12/1/2011
Castle Rock	12/1/2012	Edmonds	12/1/2011
Cathlamet	12/1/2014	Electric City	12/1/2013
Centralia	12/1/2012	Ellensburg	12/1/2013
Chehalis	12/1/2012	Elma	12/1/2014
Chelan	12/1/2013	Elmer City	12/1/2014
		Entiat	12/1/2013
		Enumclaw <i>King Co part</i>	12/1/2009
		Enumclaw <i>Pierce Co part</i>	12/1/2011
		Everett	12/1/2005
		Everson	12/1/2011

Federal Way	12/1/2009	Langley	12/1/2012
Ferndale	12/1/2011	Latah	12/1/2013
<b>Ferry Co Unincorporated</b>	<b>12/1/2014</b>	Leavenworth	12/1/2013
Fife	12/1/2011	<b>Lewis Co Unincorporated</b>	<b>12/1/2012</b>
Forks	12/1/2011	Liberty Lake	12/1/2013
<b>Franklin Co nincorporated</b>	<b>12/1/2014</b>	<b>Lincoln Co Unincorporated</b>	<b>12/1/2014</b>
Friday Harbor	12/1/2012	Long Beach	12/1/2014
<b>Garfield Co nincorporated</b>	<b>12/1/2014</b>	Longview	12/1/2012
Gig Harbor	12/1/2011	Lyman	12/1/2012
Gold Bar	12/1/2011	Lynden	12/1/2011
Goldendale	12/1/2014	Lynnwood	12/1/2011
Grand Coulee	12/1/2013	Malden	12/1/2014
Grandview	12/1/2013	Maple Valley	12/1/2009
Granger	12/1/2013	Marcus	12/1/2014
Granite Falls	12/1/2011	Marysville	12/1/2011
<b>Grant Co Unincorporated</b>	<b>12/1/2013</b>	<b>Mason Co Unincorporated</b>	<b>12/1/2012</b>
<b>Grays Harbor Co nincorporated</b>	<b>12/1/2014</b>	McCleary	12/1/2014
Hamilton	12/1/2012	Medical Lake	12/1/2013
Hoquiam	12/1/2014	Medina	12/1/2011
Hunts Point	12/1/2011	Mercer Island	12/1/2009
Ilwaco	12/1/2014	Mesa	12/1/2014
Index	12/1/2011	Metaline	12/1/2014
Ione	12/1/2014	Metaline Falls	12/1/2014
<b>Island Co Unincorporated</b>	<b>12/1/2012</b>	Millwood	12/1/2013
Issaquah	12/1/2009	<i>Milton King Co part</i>	12/1/2011
<b>Jefferson Co nincorporated</b>	<b>12/1/2011</b>	<i>Milton Pierce Co part</i>	12/1/2011
Kalama	12/1/2012	Monroe	12/1/2011
Kelso	12/1/2012	Montesano	12/1/2014
Kenmore	12/1/2009	Morton	12/1/2012
Kennewick	12/1/2013	Moses Lake	12/1/2013
Kent	12/1/2009	Mount Vernon	12/1/2012
Kettle Falls	12/1/2014	Mountlake Terrace	12/1/2011
<b>King Co Unincorporated</b>	<b>12/1/2009</b>	Mukilteo	12/1/2011
Kirkland	12/1/2009	Naches	12/1/2013
<b>Kitsap Co Unincorporated</b>	<b>12/1/2011</b>	Napavine	12/1/2012
<b>Kittitas Co Unincorporated</b>	<b>12/1/2013</b>	Nespelem	12/1/2014
<b>Klickitat Co nincorporated</b>	<b>12/1/2014</b>	Newcastle	12/1/2011
Krupp	12/1/2013	Newport	12/1/2014
La Center	12/1/2011	Nooksack	12/1/2011
La Conner	12/1/2012	Normandy Park	12/1/2011
Lacey	12/1/2011	North Bend	12/1/2011
Lake Forest Park	12/1/2009	North Bonneville	12/1/2012
Lake Stevens	12/1/2011	Northport	12/1/2014
Lakewood	12/1/2011	Oak Harbor	12/1/2012
		Oakville	12/1/2014
		Ocean Shores	12/1/2014
		Odessa	12/1/2014

Okanogan	12/1/2014	Shoreline	12/1/2009
<b>Okanogan Co</b>	<b>12/1/2014</b>	<b>Skagit Co <i>Unincorporated</i></b>	<b>12/1/2012</b>
<b><i>nincorporated</i></b>		<b>Skamania Co</b>	<b>12/1/2012</b>
Olympia	12/1/2011	<b><i>nincorporated</i></b>	
Omak	12/1/2014	Skykomish	12/1/2011
Oroville	12/1/2014	Snohomish	12/1/2011
Orting	12/1/2011	<b>Snohomish Co</b>	<b>12/1/2005</b>
<b>Pacific Co <i>Unincorporated</i></b>	<b>12/1/2014</b>	<b><i>nincorporated</i></b>	
Pacific <i>King Co part</i>	12/1/2011	Snoqualmie	12/1/2011
Pacific <i>Pierce Co part</i>	12/1/2011	Soap Lake	12/1/2013
Palouse	12/1/2014	South Bend	12/1/2014
Pasco	12/1/2014	South Cle Elum	12/1/2013
Pateros	12/1/2014	South Prairie	12/1/2011
Pe Ell	12/1/2012	Spokane	12/1/2013
<b>Pend Oreille</b>	<b>12/1/2014</b>	<b>Spokane Co</b>	<b>12/1/2013</b>
<b><i>nincorporated</i></b>		<b><i>nincorporated</i></b>	
<b>Pierce Co <i>Unincorporated</i></b>	<b>12/1/2011</b>	Spokane Valley	12/1/2013
Pomeroy	12/1/2014	Sprague	12/1/2014
Port Angeles	12/1/2011	St. John	12/1/2014
Port Orchard	12/1/2011	Stanwood	12/1/2011
Port Townsend	12/1/2005	Starbuck	12/1/2014
Poulsbo	12/1/2011	Steilacoom	12/1/2011
Prescott	12/1/2014	<b>Stevens Co</b>	<b>12/1/2014</b>
Prosser	12/1/2013	<b><i>nincorporated</i></b>	
Pullman	12/1/2014	Stevenson	12/1/2012
Puyallup	12/1/2011	Sultan	12/1/2011
Raymond	12/1/2014	Sumas	12/1/2011
Reardan	12/1/2014	Sumner	12/1/2011
Redmond	12/1/2009	Tacoma	12/1/2011
Renton	12/1/2009	Tekoa	12/1/2014
Republic	12/1/2014	Tenino	12/1/2011
Richland	12/1/2013	<b>Thurston Co</b>	<b>12/1/2011</b>
Ridgefield	12/1/2011	<b><i>nincorporated</i></b>	
Riverside	12/1/2014	Toledo	12/1/2012
Rock Island	12/1/2013	Tonasket	12/1/2014
Rockford	12/1/2013	Tukwila	12/1/2009
Rosalia	12/1/2014	Tumwater	12/1/2011
Roy	12/1/2011	Twisp	12/1/2014
Ruston	12/1/2011	Union Gap	12/1/2013
Sammamish	12/1/2009	University Place	12/1/2011
<b>San Juan Co</b>	<b>12/1/2012</b>	Vader	12/1/2012
<b><i>nincorporated</i></b>		Vancouver	12/1/2011
SeaTac	12/1/2009	<b>Wahkiakum Co</b>	<b>12/1/2014</b>
Seattle	12/1/2009	<b><i>nincorporated</i></b>	
Sedro-Woolley	12/1/2012	Waitsburg	12/1/2014
Selah	12/1/2013	Walla Walla	12/1/2014
Sequim	12/1/2011	<b>Walla Walla Co</b>	<b>12/1/2014</b>
Shelton	12/1/2012	<b><i>nincorporated</i></b>	
		Washougal	12/1/2011
		Waverly	12/1/2013

Wenatchee	12/1/2013	Woodinville	12/1/2011
West Richland	12/1/2013	Woodland <i>Clark Co part</i>	12/1/2011
Westport	12/1/2014	Woodland <i>Cowlitz Co part</i>	12/1/2012
<b>Whatcom Co nincorporated</b>	<b>12/1/2005</b>	Woodway	12/1/2011
White Salmon	12/1/2014	Yakima	12/1/2013
<b>Whitman Co nincorporated</b>	<b>12/1/2014</b>	<b>Yakima Co Unincorporated</b>	<b>12/1/2013</b>
Wilkeson	12/1/2011	Yarrow Point	12/1/2011
Wilson Creek	12/1/2013	Yelm	12/1/2011
Winlock	12/1/2012	Zillah	12/1/2013
Winthrop	12/1/2014		

## Appendix Table B:

### Shoreline Master Program Cost Estimates, 2000

<b>SMP Cost Estimate by County</b>	<b># of jurisdictions</b>	<b>Subtotal \$</b>
Adams	1	\$100,000
Asotin	3	\$150,000
Benton	6	\$550,000
Chelan	6	\$525,000
Clallam	4	\$400,000
Clark	6	\$365,000
Columbia	3	\$170,000
Cowlitz	6	\$445,000
Douglas	4	\$160,000
Ferry	2	\$150,000
Franklin	2	\$200,000
Garfield	1	\$100,000
Grant	8	\$300,000
Grays Harbor	9	\$775,000
Island	4	\$375,000
Jefferson	1	\$225,000
King	32	\$3,300,000
Kitsap	5	\$475,000
Kittitas	4	\$375,000
Klickitat	4	\$250,000
Lewis	8	\$375,000
Lincoln	3	\$200,000
Mason	2	\$200,000
Okanogan	12	\$775,000
Pacific	5	\$475,000
Pend Oreille	6	\$230,000
Pierce	19	\$1,590,000

San Juan	2	\$225,000
Skagit	9	\$745,000
Skamania	3	\$170,000
Snohomish	17	\$1,505,000
Spokane	7	\$415,000
Stevens	3	\$250,000
Thurston	7	\$575,000
Wahkiakum	2	\$150,000
Walla Walla	3	\$300,000
Whatcom	8	\$575,000
Whitman	8	\$330,000
Yakima	8	\$320,000
<b>Total</b>	<b>243</b>	<b>\$18,795,000</b>

## Appendix Table C:

### Cost/Benefit Analysis Matrix

#### Proposed 2005 Revisions to Shoreline Management Act Rules

*Prepared by Tom Clingman,  
SEA*

#### Washington Administrative Code Sections 173-18, 173-20, 173-22, and 173-27

Existing WAC Sections	Proposed Revision	Administrative Benefit/Rationale	Net Cost/Benefit
173-18-040 Streams and rivers.	Add provision noting the stream list for a county not contained in this chapter will be found in that county's shoreline master program.	Explains the absence in this chapter of those counties who have an Ecology-approved stream list in their shoreline master program.	No cost. Benefit is directing readers to the updated and Ecology-approved shoreline master programs containing the latest approved list.
173-18-044 Review of designations.	Strike provision that Ecology will update the list by county every five years. Add provision that updated county and city shoreline master programs approved by Ecology will provide the official list of Shoreline streams, and that the new shoreline master program will supersede the stream list in the WAC.	All local shoreline master programs are undergoing update over the next several years. This update process provides optimal opportunity for public participation in revising Shoreline Management Act jurisdiction lists and maps. In addition, local governments (rather than Ecology) have discretion about whether to include 1) Floodplains beyond the floodway and 2) Critical area buffers beyond the shoreland area specified in statute. Shoreline master program lists and maps will be significantly more accurate than the original WAC lists and associated maps.	No additional cost as the local governments are already updating their shoreline master programs and Ecology is already providing review and approval of each document.
173-18-046 Conflicts between designations and criteria.	Add provision that designation of water bodies covered by the Shoreline Management Act may occur through an updated shoreline master program. When a revision in designation is needed, the change needs to be reflected in local shoreline master program within 3 years.	Reflects shift proposed in 173-18-044 above to use local shoreline master programs to designate Shoreline water bodies. 3 year update provision is in response to Thurston County Superior Court case, which found delay beyond 3 years in adding a water body to the official list is excessive.	3 year update requirement will add administrative cost to local government and Ecology. Benefit is clearer application of the statute and less out-of-date lists.



173-20-044 Review of designations.	Strike provision that Ecology will update the list by county every five years. Add provision that updated county and city shoreline master programs approved by Ecology will provide the official list of Shoreline lakes, and that the new shoreline mater programs will supersede the lake list in the WAC.	All local shoreline master programs are undergoing update over the next several years. This update process provides optimal opportunity for public participation in revising Shoreline Management Act jurisdiction lists and maps. In addition, local governments (rather than Ecology) have discretion about whether to include 1) Floodplains beyond the floodway and 2) Critical area buffers beyond the shoreland area specified in statute. Shoreline master program lists and maps will be significantly more accurate than the original WAC lists and associated maps.	No additional cost as the local governments are already updating their shoreline master programs and Ecology is already providing review and approval of each document.
173-20-046 Conflicts between designations and criteria.	Add provision that designation of water bodies covered by the Shoreline Management Act may occur through an updated shoreline master program. When a revision in designation is needed, the change needs to be reflected in local shoreline master program within 3 years.	Reflects shift proposed in 173-18-044 above to use local shoreline master programs to designate Shoreline water bodies. 3 year update provision is in response to Thurston County Superior Court case, which found delay beyond 3 years in adding a water body to the official list is excessive.	3 year update requirement will add administrative cost to local government and Ecology. Benefit is clearer application of the statute and less out-of-date lists.
173-22-030(5) "Floodway" definition	Strike the last sentence of the Floodway definition so the resulting definition is identical to 90.58.030(2)(g).	Brings the WAC definition of "floodway" into compliance with the RCW definition, in conformance with the Appeals Court decision in 105 Wn. App. 278	No cost. Benefit is compliance with the relevant court decision.
173-22-040(3)(b)	Strike <del>173-19</del> and replace with <u>173-26</u> .	WAC 173-19 was repealed and replaced with WAC 173-26.	No cost. Replaces a reference to a repealed rule with the correct rule.

173-22-050 Review <u>and</u> <u>update</u> of designations.	Strikes existing text and adds <u>Each local government master program shall include a map or maps of shorelines and shorelands of the state within the jurisdiction of the master program that complies with the requirements of RCW 90.58.030(2)(c, d, e and f). When such master program is approved by the Department subsequent to the effective date of this provision, the list within the master program shall be the official list for that jurisdiction and shall supersede the list contained herein.</u>	All local shoreline master programs are undergoing update over the next several years. This update process provides optimal opportunity for public participation in revising Shoreline Management Act jurisdiction shoreland area maps. Shoreline master program shoreland area maps will be significantly more accurate than the original maps.	No additional cost as the local governments are already updating their shoreline master programs and Ecology is already providing review and approval of each document. Benefit will be more accurate and less out-of-date maps of shorelines and shoreland areas.
173-22-055 Conflicts between designations and criteria	Add provision that designation of water bodies covered by the Shoreline Management Act may occur through an updated shoreline master program. When a revision in designation is needed, the change needs to be reflected in local shoreline master program within 3 years.	Reflects the proposed use of local shoreline master programs to designate shoreland areas. 3 year update provision is in response to Thurston County Superior Court case, which found delay beyond 3 years in adding a water body to the official list is excessive.	3 year update requirement will add administrative cost to local government and Ecology. Benefit is clearer application of the statute and more accurate and less out-of-date maps of shorelines and shoreland areas.
173-22-060 Shoreline designation maps <u>until</u> <u>superseded.</u>	Identifies that the original maps created by the Department of Ecology are in effect until replaced by an approved Shoreline Master Program. Replaces superseded term "wetland" with "shorelands" per use in RCW 90.58.030(2)(f).	Reflects the proposed use of local shoreline master programs to designate shoreland areas. Changes rule terminology to match revisions in Shoreline Management Act terms.	Benefit is clearer application of the statute and more accurate and less out-of-date maps of shorelines and shoreland areas.

173-27-030(7) "Exemptions"	"Exempt" developments are those set forth in <del>WAC 173-27-040 and RCW 90.58.030 (3)(e); 90.58.140(9); 90.58.147, 90.58.355, and 90.58.515</del> statutes and which are <del>not required to obtain a substantial development permit but which must otherwise comply with applicable provisions of the act and the local master program; exempt from compliance with some or all requirements of RCW 90.58; exempt from some or all of the requirements of 90.58, its implementing rules, and shoreline master programs.</del>	Time, effort and cost savings. Removes an incomplete and constantly changing list of exemptions and removes the need to constantly update this chapter. Some exemptions from the requirements of 90.58 are NOT in 90.58. They are in other statutes which are NOT referenced in 90.58.	Removes a misleading and incomplete list of exemptions which should benefit all readers of this subsection.
173-27-030(19)	The definitions and concepts set forth in RCW 90.58.030, and chapters <del>173-25 and 173-26</del> WAC also apply as used in this chapter.	Removes reference to a non-existent WAC.	No cost. Removes reference to an non-existent WAC.
173-27-040(1 and 2) Development exempt from substantial development permit requirement	Revise to specifically identify that the exemptions addressed in this section are from <b><i>substantial development permit</i></b> requirements.	Originally, the term "exempt" as used in the SMA referred to activities exempt from obtaining a shoreline substantial development permit. However, several uses are now exempt <b><i>categorically</i></b> from the SMA. The existing rule could be confusing due to the use of "exempt." Update and clarify to reduce conflict and confusion over the meaning of the current language.	No cost. Improves the clarity and correctness of rule language.
173-27-090 Time requirements of permit	Revise to ensure consistency with RCW 90.58.143 adopted in 1997. This revision was after the last revision of this rule section.	Revises language rendered unnecessary by the adoption of 90.58.143, which provided additional detail on time requirements for shoreline permits.	No cost. Removes revises redundant language.

<p>173-27-100(3) Revisions to permits</p>	<p>Revisions to permits may be authorized after original permit authorization has expired <del>under WAC 173-27-080(2)</del>. The purpose of such revisions shall be limited to authorization of changes which are consistent with this section and which would not require a permit for the development or change proposed under the terms of chapter 90.58 RCW, this regulation and the local master program. If the proposed change constitutes substantial development then a new permit is required. Provided, this subsection shall not be used to extend the time requirements or to authorize substantial development beyond the time limits of the original permit.</p>	<p>Remove possible conflict with the underlying statutory language.</p>	<p>No cost. Removes possibly conflicting language.</p>
<p>173-27-130(5) Filing with the Department</p>	<p>Submittal of substantial development permits, conditional use permits, variances, rescissions and revisions is complete when all of the documents required pursuant to subsections (3) and (4) of this section have been received by the department. If the department determines that the submittal does not contain all of the documents and information required by this section, the department shall identify the deficiencies and so notify local government and the applicant in writing. <del>The submittal and permit</del> <u>Conditional use permits, variances and revisions thereto</u> are void unless and</p>	<p>To comply with a Court of Appeals decision invalidating existing WAC definition of the "date of filing" (115 Wn. App. 164).</p>	<p>No cost. Removes inconsistency with statutory language in accordance with court decisions.</p>

	until the material requested in writing is submitted to the department.		
173-27-130(6) Filing with the Department	Strike all text and replace with <u>The "date of filing" for all substantial development permits, whether approved or denied, is the date of Ecology's receipt of local government's permit decision.</u>	To comply with a Court of Appeals decision invalidating existing WAC definition of the "date of filing" (115 Wn. App. 164).	No cost. Removes inconsistency with statutory language in accordance with court decisions.
173-27-130(7) Filing with the Department	Strike all text and replace with <u>The "date of filing" for all conditional use permits and variances, whether approved or denied, is the transmittal date of Ecology's permit decision to the local government and applicant.</u>	To comply with a Court of Appeals decision invalidating existing WAC definition of the "date of filing" (115 Wn. App. 164).	No cost. Removes inconsistency with statutory language in accordance with court decisions.

## **Appendix D: Benefit (WTP) from 1996 Survey<sup>1</sup>**

The Contingent Valuation Method (CV) uses survey questions to elicit people's preferences for public goods by finding out what they would be willing to pay for specified improvements. The method is thus aimed at eliciting their willingness to pay (WTP) in dollars. It circumvents the absence of markets for public goods by presenting consumers with hypothetical markets in which they have the opportunity to buy the goods in question. If the study is well designed and carefully pre-tested, the respondents' answers to the valuation questions should represent valid WTP responses, and a benefit estimate can be derived.

The contingent valuation method is employed in this study to derive the benefits from Improved Habitat for Fish, Improved Habitat for Wildlife, Improved Water Quality, Recreational Benefits and Reduced Flooding. The distribution of WTP of each household in Washington can be derived from the survey. It is relatively simple to calculate the mean and median of the WTP from the distribution. Then the quantity of households in Washington each year is determined and this is multiplied by the median WTP. It is then discounted, and the result is the total benefit from CV.

The problem with the survey utilized for this study is that it didn't ask how much people were willing to pay for different quantities of "shoreline goods". It is reasonable to assume the wider the vegetation conservation area, the more effective the shoreline protection and the more people would want to pay for it, so the benefit was adjusted to different buffer widths.

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<sup>1</sup> Survey of Washington Households on the Shoreline Management Act and Related Shoreline Issues. July 1996. Washington State Department of Ecology.

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